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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,271

04/17/2006

Marc Flettner

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3472

7590

10/14/2009

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EXAMINER

WILKINS III, HARRY D

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

10/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/560,271	Applicant(s) FLETTNER, MARC	
	Examiner Harry D. Wilkins, III	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: ____. |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/8/05, 4/13/06, 7/13/06, 6/12/07.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 13, 17, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Vallendar (EP 1046616).

Vallendar teach (see figures and English translation provided by Applicant) a water treatment unit including a metallic casing (2) having proximal (top in figure 1) and distal (bottom in figure 2) ends, a metallic reacting anode (5) arranged in the metallic casing and electrically conductively connected to the metallic casing and a turbulence body (6) arranged within the metallic casing between the proximal end and the anode.

Regarding claims 17 and 18, the unit of Vallendar included a spacer/securing element (5a) which held the turbulence body in place and created an offset between the turbulence body and the anode.

Regarding claim 19, Vallendar teaches (see figures 1 and 2) that the turbulence body included at least one element through which water flowed by means of channels.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vallendar (EP 1046616).

Although Vallendar does not teach element 5a being non-conductive, one of ordinary skill in the art would have been motivated to make it from an insulating material to prevent the turbulence body from being at the same electrode potential as the anode.

5. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vallendar (EP 1046616) in view of Long, Jr et al (US 7,135,155).

Vallendar fails to disclose using a second turbulence body between the anode and the distal end of the metallic casing.

Long, Jr. et al teach (see figure 1 and col. 12, lines 4-27) the use of static mixers in similar electrode water treatment units, where the static mixers were located downstream from the first electrode (anode).

Therefore, it would have been obvious to one of ordinary skill in the art to have added a second turbulence body between the anode and the distal end of the metallic casing as suggested by Long, Jr et al for the purpose of ensuring adequate mixing of the water passing through the unit to properly cleanse the water.

6. Claims 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vallendar (EP 1046616) in view of Hargash (US 3,677,522).

Vallendar teaches the desire for the turbulence body prior to the anode, but does not teach the turbulence body being in the shape of perforated plates.

Hargash teaches (see figure 1, abstract and col. 1, lines 68-75) alternative means for generating turbulence through a flowing circular cross section of pipe. These means included plural perforated plates arranged perpendicular to the direction of flow of the fluid.

Therefore, it would have been obvious to have substituted the perforated plates for generating turbulent flow taught by Hargash for the turbulence body taught by Vallendar because each was recognized in the prior art as providing excessive agitation of a fluid flow to create a turbulent flow.

Regarding claim 21, Hargash teaches a connector 60 between the plural perforated plates.

Regarding claims 22 and 24-26, it would have been obvious to one of ordinary skill in the art to have adjusted the size and shape of the perforations on the plates in order to achieve the desired pattern and magnitude of turbulence in the fluid flow.

Regarding claim 23, Hargash teach three perforated plates, 61, 66 and 68.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D. Wilkins, III whose telephone number is 571-272-1251. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harry D Wilkins, III/
Primary Examiner, Art Unit 1795

hdw